

Abstract

A thermal inkjet actuator for use in an inkjet printer assembly includes heat conduction means arranged to realize a predetermined negative pressure profile to facilitate droplet formation. In a preferred embodiment the heat conduction means comprises a thin layer of very high thermally conductive material such as Aluminium located in the middle of a non-heat conductive passive bend layer. The overall cool-down speed of the actuator, and hence the speed with which the passive bend layer returns to its quiescent position can be controlled by controlling the proximity of the heat conductive layer to the actuator's heater during fabrication.